

AMENDMENT(S) TO THE CLAIMS

1-29 (cancelled)

30. (original) A method for monitoring a drainage element in a paper machine with a running direction, the drainage element including at least one drainage element ceramic, comprising the steps of:

measuring a temperature in at least one of the at least one drainage element ceramic, at

5 least one drainage element adhesive point and a drainage element main body;

analyzing said temperature in a process control system;

comparing said temperature to at least one threshold value; and

dependent upon said analyzing step, using said process control system for at least one of:

activating at least one control element to indicate said temperature has exceeded

10 said threshold value; and

initiating a countermeasure of one of discontinuing heating and commencing cooling in at least one of said at least one drainage element ceramic and at least one drainage element adhesive point and drainage element main body.

31. (original) The method of claim 30, including the steps of performing signal conversion of said temperature and performing data processing of said temperature following said measuring step.

32. (original) The method of claim 30, wherein said temperature is measured in said at least one drainage element ceramic on a surface of said at least one drainage element ceramic of maximum temperature.

33. (original) The method of claim 30, including the steps of creating a recess in said at least one drainage element ceramic, inserting a temperature sensor into said recess and measuring said temperature in said at least one drainage element ceramic with said temperature sensor.

34. (original) The method of claim 33, including the step of sintering said at least one drainage element ceramic after said creating step.

35. (original) The method of claim 34, including the step of molding said at least one drainage element ceramic, said creating step occurring during said molding step.

36. (original) The method of claim 34, wherein said creating step is performed by working said drainage element ceramic after said sintering step.

37. (original) The method of claim 34, including the steps of at least one of reducing the speed of a mesh screen, slowing a spray water flow rate, and reducing the vacuum on said drainage element.

38. (original) The method of claim 37, wherein said slowing step reduces said speed to approximately 0.

39. (original) The method of claim 37, including adjusting at least one spray tube thereby changing said spray water flow rate.

40. (original) The method of claim 30, including changing a drive in said paper machine thereby changing a speed of said paper machine.

41. (original) The method of claim 30, including adjusting at least one valve thereby reducing the vacuum on said drainage element.

42. (original) The method of claim 30, including adjusting at least one tension roller thereby reducing a wire tension.

43. (original) The method of claim 30, including signaling an alarm if said at least one threshold value is exceeded by said temperature.

44. (original) The method of claim 43, wherein said at least one threshold value is between approximately 800 C and 1200 C.

45. (original) The method of claim 30, including signaling an alarm when said temperature has a rate of increase greater than 20 C per second.

46. (original) The method of claim 30, including signaling an alarm if an initial said at least one threshold value is exceeded by said temperature and activating said initiating step if another said at least one threshold value is exceeded by said temperature.

47. (original) The method of claim 46, wherein said initial at least one threshold value is between approximately 800 C and 1200 C.

48. (original) The method of claim 30, wherein said signaling occurs when said temperature has a rate of increase greater than 20 C per second.

49. (original) The method of claim 30, including locating at least one temperature sensor in at least one of beginning and end of said at least one drainage element as viewed from said running direction.

50. (original) The method of claim 30, including measuring said temperature at least two positions spaced at a periodic distance lateral to said running direction.

51. (original) The method of claim 50, wherein said periodic distance is approximately 500 mm.

52. (original) The method of claim 30, including using a thermocouple to measure said temperature.

53. (original) The method of claim 30, wherein said drainage element is a ceramic rail.

54-71 (cancelled)